

378.73

M36J

V. 11

#4

2d. set.

8

Maryland University
"Official publication"

VOL. 11

SEPTEMBER, 1914.

No. 4

The Maryland Agricultural College Bulletin

SHORT COURSES

IN

**AGRICULTURE, HORTICULTURE,
POULTRY HUSBANDRY,
DOMESTIC SCIENCE.**

JANUARY 4TH TO MARCH 13TH, 1915.

Issued monthly excepting the months of November, December, January and February. Entered at College Park, Md., as Second-Class Matter under Act of August 24, 1912.



MARY

TIES

The net return from her two million acres could be increased by one million dollars more per year. Her average yield of wheat is two barrels per acre, and this would be four million barrels per year.

One pint more milk per cow per day would give the dairy-men over one million dollars more for their labor each year.

Unused hill land could be turned into pastures that would feed at least a half million sheep.

Maryland can be made the greatest fruit State in the East. Land suitable for orchard fruits that now sells for \$10 to \$30 per acre can be made worth \$150 to \$300 per acre.

OTHER CROPS CAN BE DEVELOPED PROPORTIONALLY

Maryland's soil, climate and location are exceptionally well fitted for growing food for man. She has ten million consumers in the cities and towns located at her doors.

NO STATE IN THE UNION HAS AS GOOD MARKETS

The consumers should pay less for food and the producers get more for their products than at present. Co-operation between buyer and seller will make this possible.

More profit in farming will attract settlers and increase land values.

The water-power that is going to waste on thousands of Maryland farms should be harnessed and made to lighten and do much of the farm labor.

Maryland should rank first as a state of prosperous farms and pleasant homes.

Her 200,000 growing boys and girls are entitled to as good educational facilities as other States provide for their children. They should be trained to make the most of these possibilities.

The first-class equipment of your Agricultural College for education, investigation and the demonstration of these possibilities would be the greatest factor the State could have for bringing about these desired results.

LET US HAVE A GREATER STATE THROUGH A GREATER AGRICULTURE, AND A GREATER AGRICULTURE THROUGH A GREATER AGRICULTURAL COLLEGE.

378.73

M36J

v. 11

#4

2d set

9



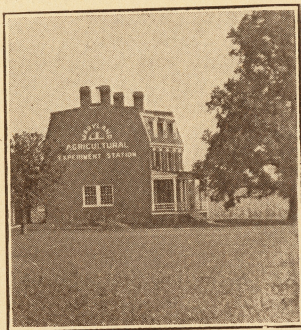
Your Agricultural College Greets You

"The trained man will lead in all great enterprises. I would advise every young man, if possible, to obtain a college education, a **SHORT COURSE**, if nothing more, to gain the college spirit."—Collingwood.

IN ANNOUNCING its Short Courses for the winter of 1915, your Agricultural College calls your attention to the fact that the Institution is an investment of the State in your behalf, and presumably operated for your profit and benefit. Whether or not you reap much direct benefit from its activities and the opportunities it offers you for helping yourself, depends entirely on how closely you interest yourself in its work and teachings.

To secure a living and profits from the soil, you have to cultivate it and study what it has to offer you. To secure from your Agricultural College help in making a living and in securing profits from it as an investment in your behalf, you must cultivate the acquaintance of its teachers and investigators and study what they have to offer you. Then, if your soil, or your Agricultural College—either of them—are not making you the returns that in your judgment they should be, you can intelligently criticize and correct the present methods of handling them so that they will yield you the profit and the benefits they should.

We know of no better way for you to secure this information, or of anything more genuinely helpful to the busy farmer or farm woman or their growing boys and girls than attending all or part of the ten-weeks' winter session at the College, beginning January 4th. These courses are on the subjects of farm crops, soil fertility, livestock management, dairying, farm mechanics, fruit growing, vegetable gardening, poultry keeping and domestic science. As instructors in these subjects, the College has, beside its regular teaching force, a considerable number of experts from Maryland and adjoining States, who have made a



Headquarters.

pronounced success of their specialties. Thus, in a nutshell of cost and time, you have the opportunity to secure the very meat of practical experience and up-to-date methods in the various branches of farming and home-making in which you are especially interested, or in which you feel the need of help.

Can you not see it to your interest to be with us this winter and see for yourself what profits your Agricultural College can be made to yield to you, personally and to your community?

Short Courses, 1915

Soil and Fertilizers.....	January	4- 9.
Farm Crops.....	January	11-16.
Domestic Science.....	January	11-16.
Poultry Husbandry.....	January	18-23.
Horticulture.....	Jan. 25-Feb.	6.
Animal Husbandry.....	February	8-27.
Farm Machinery and Farm Engines..	March	1- 6.
Farm Carpentry and Blacksmithing..	March	8-13.



Short Course Class of 1914, Poultry Section.

General Information

LOCATION AND CONNECTIONS

The Maryland Agricultural College is located at College Park, on the Baltimore and Ohio Railroad, between Baltimore and Washington, forty minutes by trolley from the United States Department of Agriculture, the Congressional Library, and the Government Experiment Farms.

SHORT-COURSE HEADQUARTERS

Adjoining the College grounds are the Agricultural Experiment Station and Farm. Here, in the Biological Laboratory Building, are located the headquarters for the Short Courses, the main lecture hall, and a demonstration room for killing, dressing, packing, etc. These rooms are floored with cement, and are commodious enough to allow of machinery, stock, etc., being brought in for study and examination, regardless of weather conditions.

CLASS-ROOMS

The lecture rooms, laboratories and greenhouses of the College are offered freely for the use of short-course students, as guests of the College and the regular student body.

LIBRARY AND READING-ROOM

The College library is open daily, and students are encouraged to consult books bearing upon their subjects of study. The privileges of the College reading-room are also extended to them.

DAIRY BARNs

A complete set of dairy barns, housing a fine herd of pure-bred Ayrshires and Guernseys, demonstrates the latest methods of dairy management. Especial attention is invited to the valuable features of the Open Dairy Barn, original with our Experiment Station.

ACCOMMODATIONS AND COST

Instruction is free. Board may be had in College Park, or in the adjoining trolley-connected towns of Hyattsville, Riverdale or Berwyn, at about \$5.00 a week for board and lodging. All persons planning to attend these courses should write us promptly, so that proper accommodations can be secured.

Address all enquiries for detailed programs and other information desired regarding the Short Courses to

H. J. PATTERSON, President,
Maryland Agricultural College.

College Park, Md.

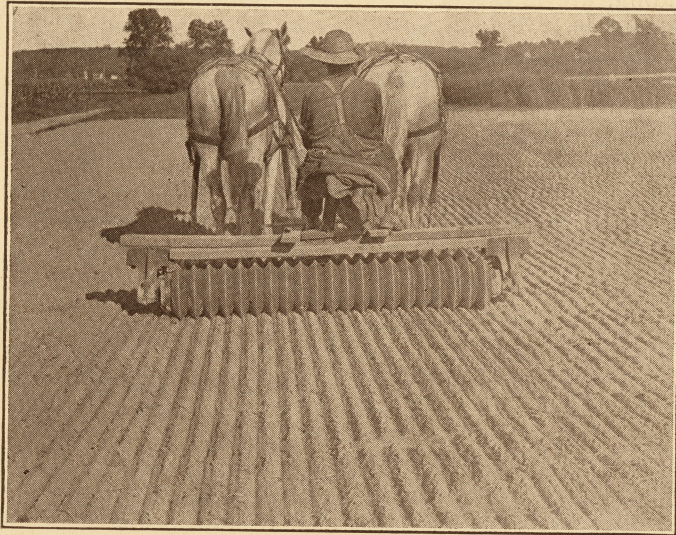
(PAGE THREE)

Soils and Manures

JANUARY 4 to JANUARY 9

W. T. L. Taliaferro
Grover Kinzy

THIS course deals with soils, their properties, and how to care for them and make them more productive and fertile. Their relation to water, air, and heat; their adaptation to various crops; their need for drainage; crop rotation, the proper application of manure, fertilizers, and lime are all discussed.



Thorough Soil Preparation.

The presence of bacteria in soils is given attention from the standpoint of soil building. Their relations to the decomposition of organic matter, to the fertility of the soil, to leguminous plants, and to the rotting of manure are explained. In this connection a well equipped soils laboratory gives the student an excellent opportunity to study the physical properties of the different kinds of soils.

Instruction is given in the home mixing of fertilizers for best results. Every effort is made to direct the student toward ways and means of enriching his soil economically, and managing it to produce profitable crops while improving it.

(PAGE FOUR)

Farm Crops

JANUARY 11 to JANUARY 16

W. T. L. Taliaferro
Grover Kinzy

Special Lecturer:
Nickolas Schmitz, Maryland Experiment Station.

FARM crops suited to Maryland conditions, their classification, adaptation to soil and climate, and various methods of culture form the subject matter of this course.

Their relations to the elements contained in the air and soil are discussed. Explanation is given of how a plant feeds, and of the food products it yields. Questions like, "What is my land good for?" "What can it best produce?" are asked and answered as correctly as possible.



Cutting Sudan Grass.

Attention is given to seed selection, the judging of grains, and the planting of improved varieties. Special lectures are devoted to corn, wheat, oats, alfalfa, clovers and forage crops. The preparation of land for these crops; their cultivation and harvesting, with a view to economical production and the saving of labor waste are taken up thoroughly.

Weeds, their nature and how to get rid of them; insects and diseases affecting farm crops are included. After many years' experience, the farmer may have learned already much of what is taught in this course, but he is sure to find out many things that he does not know, and which he cannot afford to waste time in discovering for himself.

(PAGE FIVE)

Domestic Science

JANUARY 11 to JANUARY 16.

THE Domestic Science Courses given in previous years have been highly successful in the interest aroused among the women of the State, in the high grade of instruction given, and in the appreciative and ready spirit in which this instruction has been received.

INSTRUCTORS

Mrs. E. P. Foulk, Professor of Home Economics, Ohio State University; Dr. Martha B. Lyon, Washington, D. C.; Dr. C. O. Appleman, Maryland Agricultural Experiment Station; Miss Emma S. Jacobs, Director of Domestic Science in the Washington Public Schools, and many others, have been engaged for lectures and practical demonstrations in all branches of housework and home-making.

SUBJECTS OF STUDY

The Household—The Care of Babies, Bacteriology, Household Chemistry, Home Nursing, Bandaging, Ventilation, Cleaning, the Disposal of Waste, House Furnishing.



A Future Homemaker.

The Kitchen—Selecting Meats and Vegetables, Food Values, Care of Milk, Planning Meals, Cutting up Meats, Cooking, Canning of Fruits and Vegetables and the Fireless Cooker.

Clothing—Fibres and Textiles, Sewing and Dress Planning.

Visits will be made to the College Buildings, where we hope to educate your boys and, in the near future, your girls in better farming and home-making; to the Experiment Station and Poultry Plant, where we are engaged in discovering better methods and demonstrating them to our people, and to the Dairy Barns, where we are learning and teaching how to produce the purest of milk for the babies of Maryland, both of country and city.

Note: The College 'bus will each morning meet the 9.00 o'clock trolley from Washington and the 9.10 o'clock trolley from Laurel. In the afternoon the 'bus will carry passengers from the College to meet the 5.10 and 5.30 trolley cars.

The Wide-Awake Country Boy

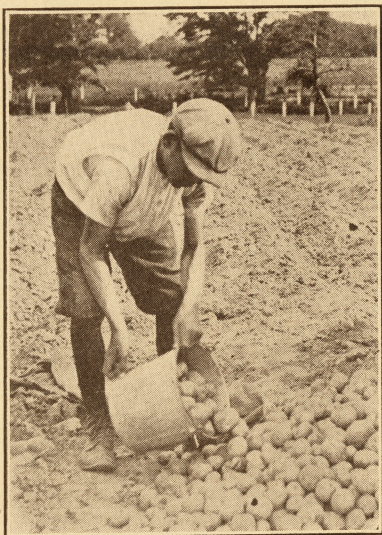
HOW SHALL HIS NEIGHBORHOOD HOLD HIM?

YOUR country boy isn't born asleep. He grows up noticing things. About the first is the road that leads *from* his father's gate. That road stands for life—for things moving and getting somewhere. On what comes up that road to the farm depends the boy's future.

Many a morning he trudges over this road on his way to school, swinging his books and dinner pail. He is supposed to be learning things at school. He learns a lot more on the way. He knows when Neighbor Higgins buys a new cow and whether or not she is a good one. He sees Neighbor Jones out in the

slush and snow still shucking his corn when it ought to have been under cover long ago, and he knows it is wrong.

Teams pass him on the road with loads of wheat and hay. He sees them come back loaded with lime and fertilizer and feed. When the road is good, he notices that they haul big loads. When it is bad, he sees that the loads they haul are smaller, that the horses are often overworked, and that his father and other farmers get mighty little for their trouble and worry. Do you wonder that often they boy does not linger—that he soon goes where



The Boy Partner.

roads are smoother and travelling pleasanter?

How are we to hold him? The answer is, perhaps, not so difficult. Ask yourself the question, "What holds me, his father, to country life?" And you will answer, "Being able to own and run my own business, having friends, getting decent returns for my labor, having a genuine liking for country life." The same things hold true for your boy. Let him have them! No, not all at once, today, tomorrow, or when he is twenty-one, but gradually, every day, as things that he must *grow into liking and having*.



His Queen in Calico.

Let him own something. Let him *earn* while he is doing his chores. Give him for what he does a calf or a pig, a little piece of land for corn or potatoes, or maybe a few strawberry plants. Let him keep them and make what he can from them, as his very own, no matter how valuable they may become. A chicken that he can keep the money for after it is sold will be worth far more to him than the heifer he loved and petted and then let you sell and for which you pocketed the price.

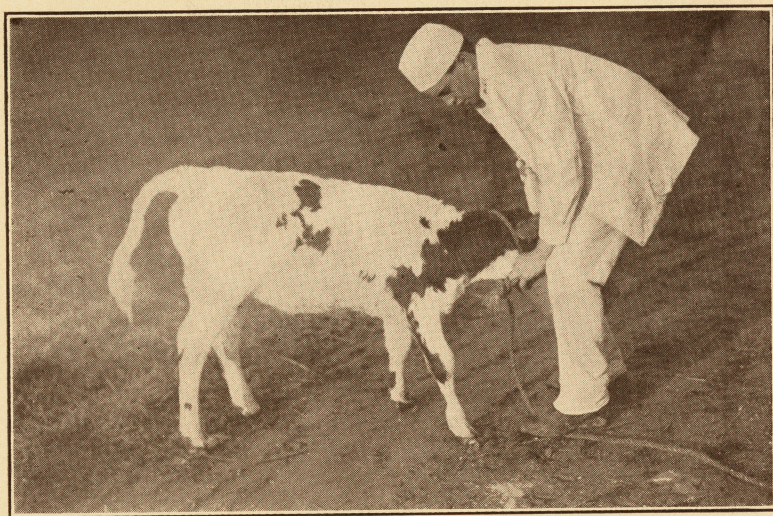
Neither is it enough just to give the boy something of his own to care for. Take him into partnership with you. Be interested in what he is doing, and interest him in what you are doing. Make him feel that the farm business is his business as well as yours, and that there is nothing better he can look forward to than being as good a farmer and citizen as yourself and possibly a better one.

You have friends. You meet and exchange views with your neighbors. You, perhaps, belong to a grange or farmers' club. Give the boy the same chance from the time he is twelve until his "sparkin' days" begin. A neighborhood club for country boys will provide for this need, but you should have belonged to such a club in order to value it properly. It will make all the difference in the world with your boy. It will bring him and the other boys who will some day be his fellow citizens and farmers *together*. They will talk over the things that interest them. They will have wholesome fun together. They will learn to trust each other and to co-operate for their common good. And they will come away from their meetings supremely satisfied with their life, their outlook, and their neighborhood. What will it cost you? The loan of a horse and buggy once or twice a month. And once a year your house will be livened with the noise and clatter of a healthy crowd of boys, that, with the joy of being together, a few cookies



A Start With Tomatoes.

and lemonade will make perfectly happy! Is it worth it? That, and giving them a chance at a better agricultural education than you had, by sending them either through an agricultural high school, or to a Short Course at your Agricultural College? Perhaps you are afraid your boy will get to know too much? No danger of that! No one ever knew too much about *his* way of living. And keeping your boy in the home neighborhood, where he is wanted and needed, depends on giving him the chance to get that lasting interest in its life and future that these things will give him. Are you going to hold the boy for your neighborhood?



Getting a Live Interest.



Poultry Husbandry

JANUARY 18 to 23

Roy H. Waite

THIS course is designed for the busy poultry keeper now engaged in the business, the beginner, and those who are thinking of taking up chicken raising. It is very obvious that we cannot make finished poultry raisers from novices in the short period of one week, but past experience has shown that those in the above mentioned classes can be greatly benefited. In fact, the object of the course is not so much to develop poultrymen who can go out and run a poultry plant from the start, but to get the student to thinking for himself.

The poultry keeper who has time and inclination for taking the course will be amply repaid by a review of the subject. New facts of interest will come up, and he will be mingling with an enthusiastic "chicken crowd."



War in the Poultry Yard.

The beginner cannot help but reap a rich harvest of information that will save him hundreds of dollars that might otherwise be wasted in mistakes or needless experiments to learn facts that are already well known and established.

The course is of especial value to the victim of "chicken fever," who is undecided as to whether or not to enter the field of poultry production. Many persons start in with very erroneous ideas as to the amount of attention required and the profits expected. They are misled by the great stories of success in the business so often told.

Full details of the subjects for discussion and demonstration, together with the special list of poultrymen engaged as teachers, will be found in the poultry course folder, to be had for the asking by all persons interested.

Horticulture

JANUARY 25 to FEBRUARY 6

T. B. Symons

Assistants:

H. Beckenstrater, E. N. Cory, B. W. Anson, R. C. Rose



A Promising Young Seedling.

apples, pears, peaches, plums, cherries and bush fruits. Their picking, packing and methods of marketing are given much attention, as being quite as important as their successful production.

Vegetable Gardening—The second week is largely occupied with seed selection, and the preparation of the seed bed for vegetables. The truck crops, such as potatoes, sweet corn, tomatoes, peas, cabbage, etc., are treated separately by experienced growers.

Demonstrations are a strong feature of this course. Much time is given to the illustration

THE aim of the two-weeks' course in horticulture is to discuss and demonstrate the most practical methods of meeting successfully the various problems which confront the fruit grower, the vegetable gardener, and the owner of the home acre.

Orcharding—Lectures are given on fruit varieties adapted to Maryland's soil, climate and markets, the selection and planting of young trees, the cultivation and feeding of the growing orchard, the protection of both the trees and their fruit against insects, pests and diseases. Special talks are given by practical authorities on



A City Gardener.

(PAGE ELEVEN)

of methods of budding, grafting and pruning; of spraying and the preparation of insecticides and fungicides; of the grading and packing of fruit; cold-frame and hotbed construction are also taken up.

The Home Acre—Its needs and possibilities in cutting down the living expenses of both farmer and suburbanite are given especial consideration. The home orchard and garden should be given the first attention over any other part of the farm. The home surroundings should be made beautiful and attractive. Not only should the home acre be developed on every farm, but wherever there is a house and a piece of ground there should be a garden and fruit trees. In the "backyard farms" of the outlying districts and suburbs of our towns and cities lies great hope for better living conditions, and healthier and happier children.



Class in Pruning, Short Course, 1914.



Farm Live-Stock

FEBRUARY 8 to FEBRUARY 20

R. H. Ruffner

S. S. Buckley, Veterinarian

Assistants in Sheep and Swine:

C. L. Opperman, R. S. Allen, Reuben Brigham



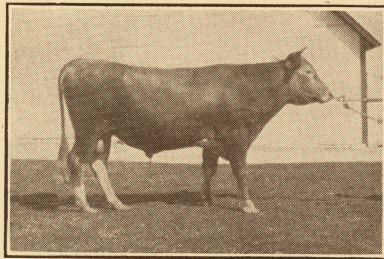
Breeding for Better Workers.

number of animals kept and the degree of attention they are given. We believe, therefore, that every legitimate means of encouragement should be brought to bear upon the Maryland farmer in making Maryland a State noted for her live-stock interests, and the breeding of her own high-class strains of farm animals.

With this end in mind, we offer as a part of this course the study of breeds, the judging of horses and cattle for soundness, condition and type, and the general principles of live stock breeding.

Thousands of dollars are spent by Maryland farmers each year in the unnecessary purchase of expensive feeds. Special emphasis is laid on the economical and rational feeding of all farm animals. Instruction is given in working out balanced rations from feeds available on individual farms and in different localities.

The course in farm live-stock is especially planned for those who wish to raise superior live-stock with economy and success. The best farming requires the keeping of farm animals, and the amount of profit obtained is directly proportionate to the



A Well-Bred Sire.



A Happy Family.

We endeavor to teach each student how to buy a good feeder. Fat cattle, hogs and lambs will be slaughtered for market in our large demonstration room. The more profitable marketing of fattened stock and the selection and handling of meats for

home and neighborhood consumption will be touched upon.

The hot-house lamb industry, its present standing and possibilities for development in many sections of Maryland, will be featured. To this end the services of two experienced growers of winter lambs have been secured, and their experience should prove most interesting to prospective sheep owners.

Students will have an opportunity to inspect the anti-hog cholera serum plant at the Experiment Station. A demonstration of the serum treatment will be included in the work of the course.



Lambs on Early Pasture.

Dairying

FEBRUARY 20 to FEBRUARY 27

R. H. Ruffner
S. S. Buckley, Veterinarian

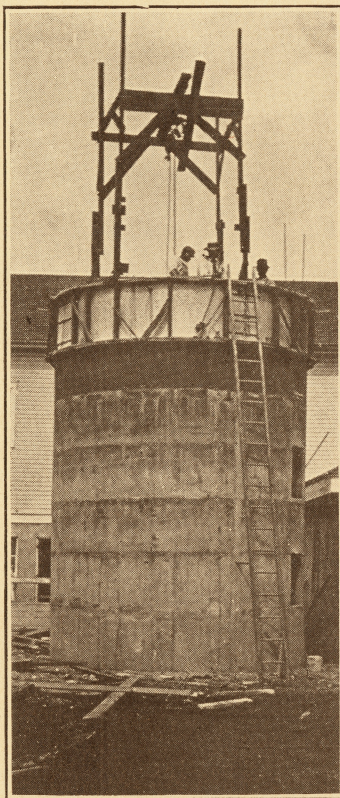
Experiment Station Assistant:
G. E. Wolcott, Dairy Extension

THE dairy industry in Maryland is of much greater magnitude than is apparent to the average observer. The most reliable figures available at the present time place the total number of dairy cows in Maryland at 166,859, with a farm value of more than \$6,000,000. This represents more investment than all the meat cattle of the State, together with its hogs and sheep. It is an industry that tends to intensify farming methods. It is one of the factors which enters most strongly into the great question of conserving soil fertility.

There are two directions in which much improvement can be made, namely, in raising the annual production of our cows and in improving the quality of our dairy products. The first is the more important. Could the annual product of the Maryland cow be advanced a few pounds of milk or butter per year, it would bring greatly increased returns to our producers.

Certain sections of Maryland are well fitted for dairying, and in such localities the industry should be encouraged as much as possible.

During the brief time allowed for dairy instruction, the following subjects will be discussed: the judging of dairy cows, dairy breeds and types co-operative breeding and testing, the building of silos, feeding for economic production, types of dairy barns, dairy sanitation, effects of dairying on the soil. Excursions will be made to the Government Breeding Farm, at Beltsville, and to the Soldiers' Home Dairy, Washington, D. C.



Silo Building.

Farm Machinery and Engines

MARCH 1 to MARCH 6

W. T. L. Taliaferro
Grover Kinzy

THE study of farm machinery and motors in this course is intended to familiarize the student with the construction and use of various implements and machines required in meeting modern farm conditions and in solving the labor problem. The gasoline engine and its adaptability to a wide variety of service will be thoroughly demonstrated.

Carpentry, Blacksmithing, Pipe-fitting

MARCH 8 to MARCH 13

Harry Gwinner, H. L. Crisp

This is a most valuable course for the average farmer. He can save much by sharpening and fitting his own tools, and by knowing when this work has been done properly.

Carpentry—A handy thing for the farmer to have is the ability to plan and construct his sheds, outbuildings, and the many appliances about the farm that need to be kept in repair.

Forging—A small forge, and the knowledge necessary to do some of his own iron work at odd times, such as making open links, chain welds or temporary machine repairs is often worth a great deal. Many a farmer in one of his rush seasons has had to lose three or four hours of the best part of his working-day in making a hurried trip to the nearest blacksmith shop, wasting both time and money.

Pipe-fitting—Knowing how to lay pipe and make sound connections is something that every enterprising farmer will find of use in supplying the house, barns and garden with water.



Cutting Fodder.

A STRONG AGRICULTURAL COLLEGE.

A PROFITABLE STATE INVESTMENT.

"A strong and active *agricultural college* is the *backbone* of any State. Other institutions may be called its brain or its heart, but that which stands for farming is its backbone. All wealth comes out of the ground. The last resort of society is in the soil, and that resort should be properly fitted for its occupants. The Agricultural College tells farmers how to make \$30 land pay interest on \$150 valuation. No other institution in the State does this with any Maryland property. The College also develops the man as well as the soil, and the best citizen is the small or medium-sized freeholder. As a matter of *plain business*, the College should be liberally equipped and supported. There can be no wiser State policy."—H. W. Collingwood, Editor, *The Rural New Yorker*.

"Be It Resolved, That the members of the Short Course Class of 1914, Maryland Agricultural College, desire to express individually and as a class, their earnest appreciation of the Short Courses which the College has made available to them, as well as the practical value of the same to them as farmers."—

From resolutions unanimously passed January 23rd, 1914.



"WHAT CHANCE WITHOUT THE PLANK?"